

## CLAIMS

1. A substrate comprising a plurality of concave portions being formed on the substrate by means of an etching process so that the plurality of concave portions are randomly arranged on the substrate.

2. The substrate as claimed in claim 1, wherein the substrate is constituted from soda-lime glass.

3. The substrate as claimed in claim 1, wherein the substrate has a usable area in which all the concave portions are formed wherein a ratio of an area occupied by all the concave portions in the usable area to the entire usable area is 90% or more when viewed from a top of the substrate.

4. The substrate as claimed in claim 1, wherein the concave portions are used for manufacturing microlenses.

5. A microlens substrate comprising a plurality of microlenses arranged on the substrate in an optically random order, the microlens substrate being manufactured using a substrate with a plurality of concave portions for providing the microlenses, the plurality of concave portions being formed on the substrate by means of an etching process so that the plurality of concave portions are randomly arranged on the substrate.

6. A transmission screen comprising a microlens substrate with a plurality of microlenses arranged on the substrate in an optically random order, the microlens substrate being manufactured using a substrate with a plurality of concave portions for providing the microlenses, the plurality of concave portions being formed on the substrate by means of an etching process so that the plurality of concave portions are randomly arranged on the substrate.

7. The transmission screen as claimed in claim 6, further comprising a Fresnel lens portion with a Fresnel lens, the Fresnel lens portion having an emission face and the Fresnel lens being formed in the emission face wherein the microlens substrate is arranged on the emission face side of the Fresnel lens portion.

8. The transmission screen as claimed in claim 6, wherein the diameter of each of the microlenses is in the range of 10 to 500 $\mu$ m.

9. A rear projection comprising a transmission screen, the transmission screen having a microlens substrate with a plurality of microlenses arranged on the substrate in an optically random order, the microlens substrate being manufactured using a substrate with a plurality of concave portions for providing the microlenses, the plurality of concave portions being formed on the substrate by means of an etching process so that the plurality of concave portions are randomly arranged on the substrate.

10. The rear projection as claimed in claim 9, further comprising:  
a projection optical unit; and  
a light guiding mirror.